

## **REMARKS**

This Amendment is fully responsive to the Office Action dated September 1, 2009, issued in connection with the above-identified application. Claims 20-35 are pending in the present application. With this Amendment, claims 20, 21, 22, 23, 26, 29 and 31-35 have been amended; and claims 21 and 27 have been canceled without prejudice or disclaimer to the subject matter therein. Specifically, independent claims 20, 31, 33 and 35 have been amended to include the features of claim 21 (now canceled); and independent claims 26, 32 and 34 have been amended to include the features of claim 27 (now canceled). Accordingly, no new matter has been introduced by the amendments made to the claims; and entry and favorable reconsideration are respectfully requested.

### **I. Claim Objections**

In the Office Action, claim 22 is objected to because the claim recites the limitation “image recognition information,” which the Examiner alleges is not supported by the Applicants’ disclosure. The Examiner indicates that the Applicants’ disclosure more accurately describes “caption recognition information.” Claim 28 is also objected for similarly reasons.

Claim 22 recites that “record instruction further includes information specifying image recognition information as supplementary data for adding to the processing content.” The Applicants disclosure describes examples of supplementary information as “corner indexing” and “caption recognition.” Additionally, the caption recognition is described as being used for recognizing character information displayed on a screen.

Moreover, the limitation “image recognition information” collectively refers to the caption recognition in the data-supplementing capability subtable, which is illustrated in Figs. 6 and 10, and the face-recognition data and the digest video data, which are discussed in item (5) of the “Related Matters” section.

The Applicant respectfully point out that the Applicants are entitled to be their own lexicographer. See *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Additionally, the meaning of words used in a claim should not be construed in a vacuum, but in the context of the specification and drawings. That is, the meaning of a particular claim term may be defined by implication, and according to the usage of the term in the context of the specification. See *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).

Accordingly, “image recognition information” is supported by the specification such that one of ordinary skill in the art would understand its meaning based on the description in the Applicants’ disclosure. Withdrawal of the objection to claims 22 and 28 is respectfully requested.

## **II. Rejection under 35 U.S.C. 102**

In the Office Action, claims 20, 23, 24, 26, 29 and 31-35 have been rejected under 35 U.S.C. 102(e) as being anticipated by Akamatsu et al. (U.S. Patent No. 7,224,886, hereafter “Akamatsu”). The Applicants have amended independent claims 20, 26 and 31-35 to help further distinguish the present invention from the cited prior art.

A. With regard to independent claims 20, 31, 33 and 35, the Applicants have amended the claims to include the features of dependent claim 21. For example, independent claim 20 *inter alia* recites the following features:

“[a] recording device for use with one or more external devices, the recording device comprising:...

a communication unit configured to convey the record instruction to the selected external device, wherein

the record instruction further includes information specifying corner indexing as supplementary data for adding to the processing content,

the first capability information further includes information indicating whether the recording device is capable of recording with the addition of the corner indexing,

the second capability information further includes information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing,

the predetermined conditions are satisfied when both of the first recording condition and a second recording condition are satisfied, the second recording condition indicating whether recording can be preformed with the addition of the corner indexing in the recording device, and

the selecting unit selects an external device that satisfies both of the first recording condition and the second recording condition, based on the collected second capability information, if the judging unit determines that both of the first recording condition and the second recording condition are not satisfied by the recording device.”

The features noted above in independent claim 20 are similarly recited in independent claims 31, 33 and 35 (as amended). That is, independent claim 31 is a corresponding method

claim and independent claim 33 is a corresponding program claim; and both claims recites steps directed to the features noted above in independent claim 20. Independent claims 35 is directed to a corresponding integrated circuit that includes the same features noted above in independent claim 20.

Independent claims 20, 31, 33 and 35 have been amended to include the feature of dependent claim 21 (now canceled). Accordingly, the features noted above in independent claim 20 (and similarly recited in independent claims 31, 33 and 35) are fully supported by the Applicants' disclosure.

The present invention (as recited in independent claims 20, 31, 33 and 35) is distinguishable from the cited prior art in that a collecting unit (or step) collects second capability information that includes information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing.

With the above structure, a recording device collects, from the one or more external devices, the information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing. When the recording device determines that it is not capable of recording with the addition of the corner indexing, the recording device can select an external device that is capable of recording with the addition of the corner indexing based on the collected information, and issues a record instruction to the selected external device.

In summary, the present invention (as recited in independent claim 20, 31, 33 and 35) is distinguishable from the cited prior art in that when the recording device is not capable of recording a broadcast program with the addition of the corner indexing, the recording device can, based on the collected information, issue the record instruction to the external device that is capable of recording the broadcast program with the addition of the corner indexing. As a result, the user of the recording device can still watch the broadcast program recorded with the addition of the corner indexing.

In the Office Action, the Examiner relies on Akamatsu for disclosing or suggesting all the features recited in independent claims 20, 31, 33 and 35. However, the Applicants assert that Akamatsu fails to disclose or suggest the features now recited in independent claims 20, 31, 33 and 35 (as amended).

Akamatsu discloses an input device that can select, out of a plurality of related devices (including the input device itself in a case where the input device has a recording function)

connected to a bus, a usable related device. In selecting a usable related device, the input device of Akamatsu refers to a recording time period and a recording capacity, which are criteria for judging whether the related device is usable or not. As described in Akamatsu, the input device can select a related device that (i) is usable during a specified recording time period and (ii) has the capacity required to record data during the specified recording time period.

However, Akamatsu neither discloses nor suggests collecting, from one or more external devices, information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing.

Accordingly, Akamatsu does not disclose or suggest (i) selecting, from among one or more external devices, an external device that is capable of recording with the addition of the corner indexing, and (ii) issuing a record instruction to the selected external device. That is, Akamatsu does not involve means for collecting, from one or more external devices, information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing. Therefore, when the user's own recording device is not capable of recording with the addition of the corner indexing, the user cannot watch a broadcast program recorded with the addition of the corner indexing.

Conversely, in the present invention (as recited in independent claims 20, 31, 33 and 35) a collecting unit (or step) collects, from one or more external devices, information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing. Thus, when the recording device determines that it is not capable of recording with the addition of the corner indexing, the recording device selects an external device that is capable of recording with the addition of the corner indexing based on the collected information, and issues the record instruction to the selected external device.

**B.** With regard to claims 26, 32 and 34, the Applicants have amended the claims to include the features of dependent claim 27. For example, independent claim 26 *inter alia* recites the following features:

“[a] proxy-recording device for use with an external device, the proxy-recording device comprising:...

a proxy-recording unit configured to (i) receive the broadcast program according to the received record instruction, and (ii) record the received broadcast program in a recording medium using the recording format, wherein

the capability information further includes information indicating if the proxy-recording device is capable of recording with an addition of corner indexing,

the record instruction further includes information specifying the corner indexing as supplementary data for adding to the processing content, and

the proxy-recording unit records the received broadcast program with the addition of the corner indexing.”

The features noted above, in independent claim 26 are similarly recited in independent claims 32 and 34 (as amended). That is, independent claim 32 is a corresponding method claim and independent claim 34 is a corresponding program claim; and both claims recites steps directed to the features noted above in independent claim 26.

As noted above, independent claims 26, 32 and 34 have been amended to include the features of dependent claim 27 (now canceled). Accordingly, the features noted above in independent claim 26 (and similarly recited in independent claims 32 and 34) are fully supported by the Applicants’ disclosure.

The present invention (as recited in independent claims 26, 32 and 34) is distinguishable from the cited prior art in that a capability-disclosing unit (or step) is configured to convey, to the external device, capability information that includes information indicating if the proxy-recording device is capable of recording with an addition of corner indexing. With the above structure, a proxy-recording device conveys, to the external device, the information indicating if the proxy-recording device is capable of recording with the addition of the corner indexing. Accordingly, when it is determined that the external device is not capable of recording with the addition of the corner indexing, the proxy-device can record a broadcast program with the addition of the corner indexing for the external device.

In summary, the present invention (as recited in independent claims 26, 32 and 34) is distinguishable from the cited prior art in that when the external device is not capable of recording a broadcast program with the addition of the corner indexing, the proxy-recording device can record the broadcast program with the addition of the corner indexing for the external device. As a result, the user of the external device can still watch the broadcast program recorded with the addition of the corner indexing.

In the Office Action, the Examiner relies on Akamatsu for disclosing or suggesting all the features recited in independent claims 26, 32 and 34. However, the Applicants assert that

Akamatsu fails to disclose or suggest the features now recited in independent claims 26, 32 and 34 (as amended).

Akamatsu discloses selecting a related device that (i) is usable during a specified recording time period and (ii) has the capacity required to record data during the specified recording time period. Therefore, the selected device can perform the recording during the recording time period specified by the input device without fail, by making use of the capacity thereof.

However, Akamatsu neither discloses nor suggests conveying, to an external device, capability information that includes information indicating if the proxy-recording device is capable of recording with an addition of corner indexing. In Akamatsu, the related device cannot convey, to the external device, the record processing capability of its own (whether it can record with the addition of the corner indexing); hence, the external device does not acknowledge the record processing capability of the related device.

That is, in Akamatsu, the external device does not acknowledge a related device that is capable of recording with the addition of the corner indexing, and the user of the external device cannot request the related device to perform the recording for the external device. The related device of Akamatsu thus cannot record a broadcast program with the addition of the corner indexing for the external device.

Conversely, in the present invention (as recited in independent claims 26, 32 and 34), when the external device is not capable of recording a broadcast program with the addition of the corner indexing, the proxy-recording device can record the broadcast program with the addition of the corner indexing for the external device. As a result, the user of the external device can still watch the broadcast program recorded with the addition of the corner indexing.

Based on the above discussion, independent claims 20, 26 and 31-35 are not anticipated by Akamatsu for at least the reasons noted above. Additionally, claims 23-25 and 28-29 are not anticipated by Akamatsu based at least on their respective dependencies (directly or indirectly) from independent claims 20 and 26.

### **III. Rejections under 35 U.S.C. 103**

A. In the Office Action, claims 21 and 27 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Akamatsu in view of Logan et al. (U.S. Publication No. 2005/0005308, hereafter "Logan").

As noted above, claims 21 and 27 have been canceled, and the features of claims 21 and 27 have been incorporated respectively into independent claims 20, 26 and 31-35. That is, the features of claim 21 have been incorporated into independent claims 20, 31, 33 and 35; and the features of independent claim 27 have been incorporated into independent claims 26, 32 and 34.

1. With regard to independent claims 20, 31, 33 and 35, Akamatsu fails to disclose or suggest all the features recited in the above claims (as amended) for the reasons noted above. Additionally, Logan fails to overcome the deficiencies noted above in Akamatsu.

Logan discloses that a host system organizes and transmits program segments to client and subscriber locations, and that metadata is employed to identify starting and ending segments of the program. In Logan, the host system (the transmitter of the program) embeds the metadata in the program, and the client (the receiver of the program) can extract the metadata from the received program.

However, Logan neither discloses nor suggests collecting, from one or more external devices, information indicating whether the one or more external devices are capable of recording a broadcast program, which is specified by the user as the target of recording, with the addition of the corner indexing.

Accordingly, Logan fails to disclose or suggest (i) selecting, from among one or more external devices, an external device that is capable of recording a broadcast program with the addition of the corner indexing, and (ii) issuing a record instruction to the selected device. That is, Logan fails to disclose or suggest means for collecting, from one or more external devices, information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing. Therefore, in Logan, when the user's own recording device is not capable of recording a broadcast program with the addition of the corner indexing, the user cannot watch the broadcast program recorded with the addition of the corner indexing.

Conversely, according to the present invention (as recited in independent claims 20, 31, 33 and 35), a collecting unit (or step) collects, from one or more external devices, information indicating whether the one or more external devices are capable of recording with the addition of the corner indexing. Thus, when a recording device determines that it is not capable of recording with the addition of the corner indexing, the recording device selects an external device that is capable of recording with the addition of the corner indexing based on the collected information, and issues a record instruction to the selected external device.

2. With regard to independent claims 26, 32 and 34, Akamatsu fails to disclose or suggest all the features recited in claims 26, 32 and 34 (as amended) for the reasons noted above. Additionally, Logan fails to overcome the deficiencies noted above in Akamatsu.

As noted above, Logan discloses a host system (the transmitter of the program) that embeds the metadata in the program, and the client (the receiver of the program) can extract the metadata from the received program. However, Logan neither discloses nor suggests conveying, to an external device, information indicating if the proxy-recording device is capable of recording a broadcast program, which has been specified by the user as the target of recording, with an addition of corner indexing.

In Logan, the client cannot convey, to the external device, the record processing capability of its own (whether it is capable of recording with the addition of the corner indexing); therefore, the external device does not acknowledge the record processing capability of the client. Without the external device acknowledging the client that is capable of recording with the addition of the corner indexing, the user of the external device cannot request the client to perform the recording for the external device. Thus, in Logan, the client cannot record a broadcast program with the addition of the corner indexing for the external device.

Conversely, in the present invention (as recited in independent claims 26, 32 and 34) when the external device is not capable of recording a broadcast program with the addition of the corner indexing, the proxy-recording device can record the broadcast program with the addition of the corner indexing for the external device. As a result, the user of the external device can still watch the broadcast program recorded with the addition of the corner indexing.

Based on the above discussion, no combination of Akamatsu and Logan would result in, or otherwise render obvious, independent claims 20, 26 and 31-35 (as amended). Additionally, no combination of Akamatsu and Logan would result in, or otherwise render obvious, claims 23-25 and 28-29 at least by virtue of their respective dependencies from independent claims 20 and 26.

**B.** Independent claims 22, 28 and 30 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Akamatsu in view of Yamada et al. (U.S. Patent No. 6,370,316, hereafter "Yamada").

1. Claim 22 depends from independent claim 20; and independent claims 28 and 30 depend from independent claim 26. Accordingly, claims 22, 28 and 30 include the features of

the independent claims from which they depend, and as noted above Akamatsu fails to disclose or suggest all the features recited in independent claims 20 and 26.

Moreover, Yamada fails to overcome the deficiencies noted above in Akamatsu. Yamada discloses technology for recognizing characters (captions) contained in a caption frame and storing the recognized characters (captions). However, Yamada neither discloses nor suggests collecting, from one or more external devices, information indicating whether the one or more external devices are capable of recording with the addition of information for recognizing characters (captions) contained in a caption frame. Accordingly, no combination of Akamatsu and Yamada would result in, or otherwise render obvious, claims 22, 28 and 30 at least by virtue of their respective dependencies from independent claims 20 and 26.

2. Additionally, claims 22, 28 and 30 are also believed to be distinguishable from the cited prior art on their own merit.

The present invention (as recited in claim 22 ) is characterized in that a recording device collects, from one or more external devices, the second capability information that includes information indicating whether the one or more external devices are capable of recording with the addition of the image recognition information. The recording device collects, from the one or more external devices, the information indicating whether the one or more external devices are capable of recording with the addition of the image recognition information.

Therefore, when the above recording device determines that it is not capable of recording with the addition of the image recognition information, the above recording device can issue a record instruction to an external device that is capable of recording with the addition of the image recognition information based on the collected information.

Yamada neither discloses nor suggests collecting, from one or more external devices, information indicating whether the one or more external devices are capable of recording with the addition of information for recognizing characters (captions) contained in a caption frame.

The present invention (as recited in claim 28) is characterized in that the proxy-recording device conveys, to an external device, capability information that includes information indicating if the proxy-recording device is capable of recording with an addition of image recognition information. The proxy-recording device can convey, to the external device, the information indicating if the proxy-recording device is capable of recording with the addition of the image recognition information. Therefore, when it is judged that the external device is not capable of

recording with the addition of the corner indexing, the proxy-recording device can record a broadcast program with the addition of the image recognition information for the external device.

Conversely, Yamada discloses recognizing characters (captions) contained in a caption frame and storing the recognized characters (captions). However, Yamada neither discloses nor suggests the above feature of pending Claim 28, i.e., conveying, to the external device, information indicating if the recording can be performed with an addition of information for recognizing the characters (captions) contained in the caption frame. Additionally, claim 30 depends from claim 28.

Accordingly, claims 22, 28 and 30 are also distinguished from the cited prior art on their own merit for at least the reasons noted above.

C. In the Office Action, claim 25 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Akamatsu in the Imada et al. (U.S. Patent No. 7,254,886, hereafter “Imada”).

Claim 25 depends from independent claim 20. As noted above, Akamatsu fails to disclose or suggest all the features recited in independent claim 20 (as amended). Additionally, Imada fails to overcome the deficiencies noted above in Akamatsu. Therefore, no combination of Akamatsu and Imada would result in, or otherwise render obvious, claim 25 at least by virtue of its dependency from independent claim 20.

#### **IV. Claims 23, 24 and 29**

In addition to the arguments presented above, the Applicants assert that at least 23, 24 and 29 are distinguishable from the cited prior art on their own merit.

A. Claim 23 is characterized in that a recording device collects, from one or more external devices, second capability information that includes information indicating a broadcast program receivable by the one or more external devices. As described in the Applicants’ disclosure, the information indicating the broadcast program receivable by the one or more external devices may include, for example, a channel number and a region ID. When the recording device receives a record instruction to record a broadcast program that it cannot receive, the recording device collects, from one or more external devices, information indicating a broadcast program receivable by the one or more external devices. Therefore, the recording device can instruct an external device located in a different area to record the broadcast program for the recording device.

Conversely, Akamatsu neither discloses nor suggests collecting, from one or more external devices, information indicating a broadcast program receivable by the one or more external devices. Moreover, the remaining cited prior art fails to overcome the deficiencies noted above in Akamatsu. Accordingly, claim 23 is distinguished from the cited prior art on its own merit.

B. Claim 24 is characterized in that the recording device (i) monitors whether the selected external device to which the record instruction has been conveyed has completed the recording according to the recording instruction, and (ii) requests the selected external device to transmit the recorded broadcast program when determining that the recording according to the recording instruction has been completed. The recording device can (i) convey, to the selected external device, the record instruction to record the broadcast program that could not be recorded by the recording device; and (ii) after the selected external device has completed the recording of the broadcast program, copy this broadcast program to itself.

In the Office Action, the Examiner indicates that Fig. 25 of Akamatsu illustrates management of reservation data (Step S2507). However, Akamatsu neither discloses nor suggests requesting the transmission of the recorded broadcast program. Moreover, the remaining cited prior art fails to overcome the deficiencies noted above in Akamatsu. Accordingly, claim 24 is distinguished from the cited prior art on its own merit.

C. Claim 29 is characterized in that the proxy recording device conveys, to an external device, capability information that includes information indicating a broadcast program receivable by the proxy-recording device. The proxy-recording device conveys, to the external device, the information indicating a broadcast program receivable by the proxy-recording device. Accordingly, when the external device receives a record instruction to record a broadcast program that it cannot receive, the above proxy-recording device can record this broadcast program with the addition of the image recognition information for the external device. In the above manner, when the user of the external device instructs the external device to record a broadcast program that is not receivable by the external device, the proxy-recording device can record this broadcast program for the external device.

Conversely, Akamatsu neither discloses nor suggests conveying, to the external device, information indicating a receivable broadcast program. Moreover, the remaining cited prior art

fails to overcome the deficiencies noted above in Akamatsu. Accordingly, claim 29 is distinguished from the cited prior art on its own merit.

**V. Conclusion**

In light of the above, the Applicants respectfully submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass the present application to issue. The Examiner is requested to contact the undersigned attorney by telephone to resolve an issues remaining in the application.

Respectfully submitted,

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